

SELAGINELLA Densa RYDB., AN ILLEGITIMATE NAME

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Selaginella densa Rydb., a species widely distributed in Western North America from southern Alaska, through the western third of Canada down through the Rocky Mountains region of western United States to New Mexico, Arizona and Texas, is illegitimate, being antedated by S. densa Hort. ex Sim (1859) for cultivated plants from Brazil. The next available name for our western plant is S. engelmannii Hieron., S. longipila and S. haydenii being reduced to synonyms for the reasons stated below.

Selaginella densa Hort. ex R. Sim, Cat. No. 6: 60, no. 797 (descr.). 1859; Abbey in Journ. Hort. & Cult. Gard. 6: ciii (Descr.). 1864; Spring ex Cz. & Warcz., Cat. Hort. Cracov., p. 13 (nomen). 1864; Nicholson, Dict. Gard., 3: 409 ("a garden name for S. apus"). 1887. (Brazil). This same name was also used by Lauche, Verzeichniss Hort. Augustin., p. 8 (nomen). 1856; Hort. ex A.Br., Ind. Sem. Hort. Berol., App. p. 23 (sub S. apus). 1857; Backh. Cat., p. 22. 1857.

Hieronymus (Hedwigia 39: 291-296, Dec. 28, 1900) described three new species, all of which refer to the same species, S. densa Rydb.

SELAGINELLA LONGIPILA Hieron. (l.c., p. 291) is discarded because the locality given for this species by Hieronymus is "Himalaya" and "Bhotan", even though the specimens (Tryon, Ann. Missouri Bot. Gard. 42: 70. 1955) are actually S. densa var. densa. Tryon selected as type, Saskatchewan, Fort Carlton, Bourgeau, Mar. 29, 1858. Selaginella longipila of authors, as Alston (Proc. Nat. Inst. Sci. India, 11: 214. 1945) is S. indica (Milde) Tryon from Nepal, Bhutan and Khasia.

SELAGINELLA HAYDENII Hieron. (l.c., p. 296) is discarded because there is some confusion over the type localities, and those given are very general. Originally, Hieronymus gave "Nebraska", Black Hills, Hayden 1853-54 (B); Hayden ex NY, 1859, in US; paratype: Oregon (then Washington), Lyall (B; fragm. in NY).

SELAGINELLA ENGELMANNII Hieron. (l.c., p. 294), based on a specimen from Colorado is the most acceptable name to replace S. densa Rydb.

Several of our floras from western United States have used S. densa Rydb. for this species. Rydberg in his Flora of the Rocky Mountains reduced S. engelmannii, S. bourgeauii and S. haydenii Hieron. to S. densa. Also Rydberg placed S. columbiana A.A.Eaton under S. montanensis Hieron. (l.c., p. 293). However, S. columbiana A.A.Eaton belongs under S. scopulorum Maxon and S. montanensis Hieron. belongs to S. wallacei Hieron. (l.c., p. 297). Broun (Index to North American Ferns, p. 159. 1938) maintains Wallacei over S. montanensis Hieron. Tryon places S. bourgeauii Hieron. under S. rupestris (L.) Spring.

During my studies of Selaginella several collections and localities in addition to those given by Tryon (1955) help to fill in the distribution of S. engelmannii and its varieties. I wish to thank the curators in the following herbaria for permitting me to annotate the specimens in their herbaria: Univ. of South Dakota (SDU); Univ. of North Dakota (NDA); Univ. of Southwest Louisiana (USWLA); Univ. of Delaware (U.Dela.); Univ. of Connecticut (CONN); Herb. of Fish & Wildlife Service at Patuxent, Maryland. Specimens in the Reed Herbarium are indicated by REED and those in the United States National Herbarium by US.

SELAGINELLA ENGELMANNII Hieron., Hedwigia 39: 294, no. 5. 1900 (Dec. 28). Colorado near Empire City. G. Engelmann. Aug. 27, 1874 (B, holotype; US).

SELAGINELLA ENGELMANNII VAR. ENGELMANNII

Syn.: S. densa Rydb., Mem. N.Y. Bot. Gard. 1: 7. 1900, non S. densa Hort. ex Sim, 1859. Montana, Little Rocky Mountains, Dr. V. Havard, 1889 (NY, holotype; fragm. at US; paratypes: Newberry, NY; Williams 534; Tweedy 172; Montana, Mrs. Jennie Moore). (Watson in 1880, GH is S. wallacei Hieron.).

S. densa var. densa; Tryon, Ann. Missouri Bot. Gard. 42: 68, fig. 44, 45, 47, map 45. 1955.

S. longipila Hieron., Hedwigia 39: 291. 1900 (Dec. 28). Saskatchewan, Fort Carlton, Bourgeau, Mar. 29, 1858; Hb. Kew Exs. No. 1239 (B, NY, P, US, YU), wrongly labeled "Himalaya", B; paratype: Hb. Griffith, Ehotan, B; fragm. NY. Tryon (l.c., p. 70) states that the type specimens of Hieronymus species, S. longipila, are actually S. densa var. densa.

S. rupestris forma longipila A.Br. ex Hieron. ex Hedwigia 39: 291. 1900 (in syn.).

S. haydenii Hieron. in Hedwigia 39: 296 (as haydenii). 1900 (Dec. 28). (Lectotype: S. Dakota, Black Hills, 1853-54. F.V. Hayden (B, Mo, NY, US); paratype: "Oregon", 49 N. Lat., 1858-59. Lyall (B, NY).

S. rupestris var. densa (Rydb.) Clute, Fern Allies, 142. 1905.

S. rupestris forma engelmannii (Hieron.) Clute, in Fern Bull. 16: 52. 1908.

S. rupestris forma haydenii (Hieron.) Clute, in Fern Bull. 16: 52. 1908.

Canada (Manitoba, Saskatchewan, Alberta, British Columbia); United States (Montana, North Dakota, South Dakota, Oregon, Wyoming, Colorado, Nebraska).

Saskatchewan: St. Lazaire, sandy open soil. July 21, 1961. B. deVries 786 (REED); Swift Current, dry prairie, growing in all bare places. June 24, 1947. A.J. Breitung 4024 (DAO, REED). Manitoba: Spruce-cactus sand hills, 3 mi. SSW of Carberry. May 15, 1954. Askell & Doris Love 6259 (NDA, REED). Colorado: Pikes Peak. Aug. 8, 1903. John L. Sheldon. (WVa, REED). Montana: Abundant

on short grass prairies, 2 mi. S of Dagmar, Medicine Lake, Nat. Wildlife Refuge, Sheridan Co. Aug. 10, 1943. Neil Hotchkiss 6931 (Fish. & Wildlife, Patuxent); Middle Creek, Gallatin Valley. July 4, 1898. J.W. Blankenship. (NDA, REED). Nebraska: Prairie covered hillsides at Atkinson Lake Rec. Area, Atkinson, Holt Co. Sept. 21, 1960. John W. Thieret 6325. (USWLa, REED); North Dakota: Dry prairie, Towner, McHenry Co. Aug. 1902. L.R. Haldron 2337. (NDA); Towner, McHenry Co. Aug. 12, 1908. Dr. J. Lunell. (CONN, REED); 15 mi. S of Towner, McHenry Co. July 11, 1955. O.A. Stevens 1535. (NDA); dry prairie, E of Marmarth, Bowman Co., alt. 854 ft. June 11, 1952. Robt. T. Clausen 8200. (NDA, REED); dry prairie, Epping, Williams Co. Aug. 14, 1941. O.A. Stevens. (NDA, REED); on rocky slopes of butte, Sentinel Butte, Golden Valley Co. Sept. 13, 1911. H.F. Bergman 1158. (NDA, REED); top of rocky hill, Powers Lake, Burke Co. June 30, 1946. O.A. Stevens. (NDA); prairie openings in oakwoods, Killdeer Mts., Dunn Co. July 12, 1960. O.A. Stevens & D.R. Moir. (NDA); sandy prairie, Hamm, Eddy Co. July 11, 1959. O.A. Stevens 2110. (NDA); on gumbo in Bad Lands, Wade, Grant Co. July 12, 1907. W.B. Bell 632. (NDA); dry prairie, Ross, Mountrail Co. July 12, 1960. O.A. Stevens & D.R. Moir. (NDA); dry sandy prairie ridge, Akra, Pembina Co. May 27, 1951. O.A. Stevens 1234. (US, NDA); dry prairie at foot of butte, Black Butte, Slope Co. July 14, 1960. O.A. Stevens & D.R. Moir. (NDA); dry rocky hillside, Dickerson, Stark Co. June 21, 1910. H.F. Bergman. (NDA); Minot, Ward Co. July 1, 1909. J. Lunell. (NDA). South Dakota: Slim Buttes, Harding Co. Aug. 20, 1910. S.S. Visher 25. (SDU, REED); common on high Tablelands, Cave Hills, Harding Co. July 15, 1920. W.H. Over & Solem 11358. (SDU, REED); valley near State Game Lodge. June 26, 1924. Arthur C. McIntosh 406. (SDU); hills just W of Deerfield. July 15, 1924. Arthur C. McIntosh A-46. (SDU).

✓ SELAGINELLA ENGELMANNII VAR. SCOPULORUM (Maxon) Reed, comb. nov.

Syn.: S. densa var. scopulorum (Maxon) Tryon, Ann. Missouri Bot. Gard. 42: 67, fig. 43, map 44. 1955.

S. scopulorum Maxon, in Amer. Fern Journ. 11: 36. 1921. (Holotype: Montana, vic. Cracker Lake, Glacier Nat. Pk. Standley 15732 (US); paratypes: listed by Tryon, 1955).

Lycopodium bryoides Nutt. ex Baker, Handb. Fern Allies, p. 35. 1887 (in syn.). (Specimen at Kew; fragm. at NY).

S. columbiana A.A. Eaton ex Maxon, Amer. Fern Journ. 11: 37. 1921 (in syn.). (Evidently based on Shaw 398 and Heacock 235, both from British Columbia).

Canada (Alberta and British Columbia); United States (Montana, Washington, Oregon, Wyoming, Idaho, Utah, Colorado, California, Texas, Arizona and New Mexico).

Montana: Swift Current Trail, Belt Mts. Aug. 1925. (no. coll). (U. Dela., REED); Red Rock Falls near Many Glacier, Glacier Nat. Park. July 26, 1926. M.J. Elrod. (U. Dela., REED). Oregon: Rolling ground, 1 mi. E of Black Rock Lookout, elev. 500 ft. Aug. 6, 1944. Daisy Overlander. (Oregon St. Coll. 60691, REED).

SELAGINELLA ENGELMANNII var. *STANDLEYI* (Maxon) Reed, comb. nov.

Syn.: *S. standleyi* Maxon in Smiths. Misc. Coll. 72(5): 9. 1920.
(Holotype: Montana, vic. Sexton Glacier, Glacier Nat. Park. Aug. 7, 1919. Standley 17228 (US); paratypes listed by Tryon, 1955).

S. densa var. *standleyi* (Maxon) Tryon, Ann. Missouri Bot. Gard. 42: 71, fig. 46, map 46. 1955.

Southern Alaska; Alberta and British Columbia; Montana and Colorado.

Colorado: Pikes Peak, at timberline, S of Windy Point Section House, 11800 ft. elev. Sept. 3, 1922. I.M. Johnston 3908. (US, REED); Intermediate between var. *standleyi* and var. *scopulorum*: neutral sandy soil on sandstone hills just N of Gothic, 9500 ft. elev., Gunnison Co. July 16, 1937. E.T. Wherry. (REED).

NOTES ON NEW AND NOTEWORTHY PLANTS. XL

Harold N. Moldenke

ALOYSIA GRATISSIMA var. *PARAGUARIENSIS* (Briq.) Moldenke, comb. nov.

Lippia ligustrina var. *paraguariensis* Briq., Ann. Conserv. & Jard. Bot. Genève. 7-8: 305. 1904.

ALOYSIA GRATISSIMA var. *REVOLUTA* (Moldenke) Moldenke, comb. nov.

Aloysia lycioides var. *revoluta* Moldenke, Phytologia 3: 108. 1949.

ALOYSIA GRATISSIMA var. *SCHULZAE* (Standl.) Moldenke, comb. nov.

Lippia ligustrina var. *schulzii* Standl., Field Mus. Publ. Bot. 4: 256. 1929.

LIPPIA HIRSUTA var. *GLABRESCENS* Moldenke, var. nov.

Haec varietas a forma typica speciei foliis glabris vel glabrescentibus recedit.

This variety differs from the typical form of the species in having the leaves glabrous, subglabrous, or glabrescent beneath.

The type of the variety was collected by Ellsworth Paine Killip, Fred Alexander Barkley, and Brother Julián González Daniel (no. 39841) at the edge of a woods along the road from Medellín to Rionegro, at an altitude of 2000 meters, Antioquia, Colombia, on November 17, 1948, and is deposited in the Britton Herbarium at the New York Botanical Garden.

VERBENA CANESCENS f. *ALBIFLORA* Moldenke, f. nov.

Haec forma a forma typica speciei corollis albis recedit.

This form differs from the typical form of the species in